IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: **Tetsushi TAGUCHI et al.** Group Art Unit: ***1623***

Application Number: **10/527,694** Examiner: **Scarlett Y. Goon**

Filed: **November 1, 2005** Confirmation Number: **7280**

For: **BIOLOGICAL LOW-MOLECULAR-WEIGHT DERIVATIVES**

Attorney Docket Number: **052203**
Customer Number: **38834**

DECLARATION UNDER 37 CFR §1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Tetsushi TAGUCHI, hereby declare and state that:

(1) I am one of the inventors of the invention of U.S. Patent Application Serial No. 10/527,694.

(2) Paragraph [0021] of Nagura discloses the spelling ratio as follow:

$$S = (Ws-Wd)/Wd \quad (i)$$

(3) In the present application, the water content (Wc) was defined as follow:

$$Wc = ((Ws-Wd)100)/Ws \qquad (ii)$$

where Wc represents a water content of the gel, Ws represents a weight of the gel in the equilibrium swelling condition, and Wd represents a weight of the gel in the dry condition. From the formula (ii), Ws is calculated as follow:

$$Ws = 100Wd/(100-Wc) \qquad (iii)$$

Formula (iii) can be substituted in Formula (i) as follow:

$$S = ((100Wd)/(100-Wc)-Wd)/Wd$$
$$= Wc/(100-Wc) \qquad (iv)$$

From Formula (iv), Wc has a relationship with S as follows:

$$Wc = 100S/(1+S) \qquad (v)$$

(3) Nagura discloses that as examples, an AOS type gelatin and a BOS type gelatin were used (paragraph [0022]), which were chemically crossliniked by using succinic acid (SA), adipic acid (AA) and citric acid (CA) to obtain gelatin film as Examples 2-4 and 6-8. *See* paragraphs [0022]-[0024]

(4) Nagura discloses the swelling ratio S(30℃), (S40℃) of the Examples in Table 1. From the data disclosed by Nagura, the water content Wc can be calculated as shown in the following Table:

No.	ゼラチン	S(30℃)	S(40℃)	Wc(30℃)(%)	Wc(40℃)(%)
1	AOS-h	2.66	4.44	73	82
2	AOS-CA	1.78	1.73	64	63
3	AOS-SA	2.55	3.58	72	78
4	AOS-AA	3.55	3.33	78	77
5	BOS-h	3.11	11.0	76	92
6	BOS-CA	1.56	1.44	61	59
7	BOS-SA	3.44	5.77	77	85
8	BOS-AA	2.05	1.89	67	65

(4) In Examples 2-4 and 6-8, the maximum water content of Nagura's gel was 85%.

(5) Examples 2 and 6 using citric acid (CA) had a water content of 59-64%.

(6) The Examples of the crosslinked high-molecular-weight products as shown in Tables 1-5 of the specification of the present invention had a water content of 96-98%. I believe the water content of the Examples of the present invention was significantly higher than that of Nagura. I believe the results of the present invention were unexpected over the prior art.

(7) I hereby declare that all statements made herein of my own knowledge are true and that all

statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under the laws of the United State and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Tetsushi Taguchi 11/16/2009

Tetsushi Taguchi Date